DIGESTION IN LEOPARD GECKOS (Eublepharis macularius)

P. Koelle, Dr. med. vet., PD, Cert spec. Rep Amph, Cert. Spec. For Fish, Cert. Spec. for Pet Nutrition Consultation¹* and S. Reese, Dr. med. vet., PD, Cert spec. for Anatomy, Cert. spec. for Information Technology²

¹Clinic of Small Animal Internal Medicine, Veterinaerstrasse 13, D-80539 Muenchen, Germany; ²Chair in Anatomy, Histology and Embryology, University of Munich, Veterinaerstrasse 13, D-80539 Muenchen, Germany

ABSTRACT

Gastrointestinal passage time is only known in some lizard species.¹ It is affected by species, body size, composition of the diet, and environmental temperature.

Six docile leopard geckos (*Eublepharis macularius*), three male and three female specimens, from a private owner were kept in terraria featuring different temperature zones $(22 - 32^{\circ}C)$ and were fed either pinkies or mealworms. Gastrointestinal passage from esophagus to cloaca was monitored by ultrasonography directly after feeding, and throughout the course of gastrointestinal passage.

The ultrasonography machine was a My Lab One Vet (Esaote piemedical, Maastricht, Netherlands). A linear array probe (SL 3116) with 22 MHz was used for examination.

As prey animals could only be identified until the end of digestion in the stomach by ultrasonographical examination, chromium oxide was added as a marker to the prey animals for examination of total gastrointestinal passage time. Prey animals were dusted with chromium oxide after a wash-out phase.

There were significant variations in gastrointestinal passage time detectable depending on prey animals, feeding intervals and individual animal. Prey animals remained up to 15 minutes in the esophagus. Pinkies remained up to 49 hours in the stomach, and mealworms up to 52 hours. Total gastrointestinal passage times varied considerably even in adult leopard geckoes with the same husbandry conditions, and fed the same prey animals (mealworms 49–219 h, pinkies: 51 – 216 h).

Time required for food passage through the digestive tract was revealed to be much longer in Leopard geckoes than in *Lacerta* spp. ¹

LITERATURE CITED

1. Taddei A. 1951. Contributo allo studio del canale alimentare in Lacerta. Boll Zool, 18: 291-294.

